

WHAT IS CLAIMED IS:

1. A method for laminating a plurality of thin plate parts, comprising the steps of:

5 providing a plurality of thin plate parts side by side in each of a plurality of frames, each one of the plurality of frames having a positioning hole with a deformable retainer portion; and

10 inserting a pin into the positioning hole of each one of the plurality of frames while stacking the plurality of frames to cause the retainer portion of the positioning hole to deform to align the plurality of frames with each other.

15 2. The method of claim 1, further comprising the step of applying an adhesive to each of the plurality of thin plate parts.

20 3. The method of claim 1, wherein the retainer portion deforms plastically.

4. The method of claim 1, wherein the retainer portion includes at least three projections that extend inwardly from an inner periphery of the positioning hole.

5. Method for manufacturing a laminated product from thin plate parts, comprising the steps of:

providing a plurality of thin plate parts side by side in a frame by interposing a connecting piece, smaller in width than each of the plurality of thin plate parts, between each of the plurality of thin plate parts and the frame, the frame having a positioning hole with a deformable retainer portion;

repeating the providing step to prepare a plurality of frames;

applying an adhesive to each of the plurality of thin plate parts;

inserting a pin into the positioning hole of each of the plurality of frames while stacking the plurality of frames, the inserted pin deforming the retainer portion of each of the positioning holes so as to align the plurality of frames with each other; and

cutting the connecting piece from each of the plurality of thin plate parts to remove laminated thin plate parts from the stacked frames.

6. The method of claim 5, wherein the connecting piece is located at a different position in each of the laminated thin plate parts.

7. A method for manufacturing an ink-jet head,
comprising the steps of:

forming a plurality of different type plates and a
plurality of frames, each of the plurality of different
5 type plates having an ink passage and being formed with a
corresponding frame of the plurality of frames;

applying an adhesive to each one of the plurality of
different type plates;

stacking each one of the plurality of frames such
10 that the ink passage of one of the plurality of different
type plates communicates with the ink passage of another
one of the plurality of different type plates; and

removing laminated different types of plates from
the stacked frames.

8. The method of claim 7, wherein each of the
plurality of frames has a positioning hole with a
deformable retainer portion, and by inserting a pin into
the positioning hole of each of the plurality of frames
20 in the stacking step, the retainer portion of the
positioning hole deforms to align each of the plurality
of frames with each other.

9. The method of claim 7, wherein each plate is
25 connected to each of the plurality of frames by a

connecting piece smaller in width than each of the plurality of different plates, and the connecting piece is cut from each plate in the cutting step.

5 10. The method of claim 9, wherein the connecting piece is located at a different position in each of the laminated different types of plates.

10 11. The method of claim 9, wherein the connecting piece is provided separate from the ink passage of each plate.

15 12. The method of claim 9, wherein each of the plurality of different type plates is thin and rectangular, and the connecting piece is disposed on a lateral side perpendicular to a longitudinal direction of each of the plurality of different type plates.

20 13. The method of claim 12, wherein the connecting piece includes a plurality of connecting pieces provided symmetrically with respect to a longitudinal center line of each of the plurality of different type plates.

25 14. Method for manufacturing a laminated product from thin plate parts, comprising the steps of:

providing a plurality of thin plate parts side by side in a frame by interposing a connecting piece, smaller in width than each plate part, between each thin plate part and the frame, the connecting piece being
5 located at a different position in each thin plate part;
repeating the providing step to prepare a plurality of frames;

applying an adhesive to each of the plurality of thin plate parts;

10 stacking the plurality of frames to laminate thin plate parts; and

cutting the connecting piece from each of the plurality of thin plate parts to remove the laminated thin plate parts from the stacked frames.

15 15. The method of claim 14, wherein each one of the plurality of thin plate parts comprises a circuit having an electrically conductive pattern.

16. The method of claim 4, wherein the at least three projections have a convex and semicircular end.

20 17. The method of claim 4, wherein the at least three projections each have a linear end portion.

18. The method of claim 4, wherein the retainer portion includes a groove disposed at the positioning hole perimeter.

19. The method of claim 5, wherein each one of the plurality of thin plate parts comprises a circuit having an electrically conductive pattern.

20. The method of claim 1, wherein each one of the
5 plurality of thin plate parts comprises a circuit having an electrically conductive pattern.